



July 11, 1991

MEMORANDUM

SUBJECT: Ridgefield, Total and Dissolved Metal Analysis

FROM: Isa Chamberlain, Metals Senior Chemist *ISW 1/12/91*

TO: Marcia Bailey, Project Officer

Sample Receipt:

The samples from the Ridgefield Project were received by the Manchester Laboratory on 3/29/91 in good condition.

Holding Times:

All analyses were performed within the specified holding times for metals analysis (28 days for mercury, 180 for all other metals).

Instrument Calibration:

Instrument calibration was performed before each analytical run and checked by initial calibration verification standards and blanks. Continuing calibration standards and blanks were analyzed at a frequency of 10% during the run and again at the end of the analytical run. All initial and continuing calibration verification standards were within the control limits of +/- 10%. AA calibration gave correlation coefficients greater than the criteria of 0.995. A correlation coefficient of 0.995 or higher means that the calibration is acceptable.

Procedural Blanks:

The procedural blanks associated with these samples showed no detectable levels of arsenic. Chromium was found at low levels in the blanks therefore, all chromium results within 10 times the detection limits are (B) qualified.

Spiked Sample Analysis:

Spiked sample and duplicate spiked sample analysis were performed on sample number(s) 91130152 for total arsenic analysis and 91130159 for dissolved arsenic. Spikes for chromium are not required by the method but an analytical spike was performed on sample 91130152 to evaluate the analysis. All spike recoveries were within the acceptable limits of +/- 25% for water sample analysis.



Precision Data:

The duplicate results of the spike and duplicate spiked sample were used to calculate precision related to the analysis of these samples. The % RPD for arsenic was well within the +/- 10% window for duplicate analysis.

Standard Reference Material:

Standard reference material or external verification standards were all within the windows established for each parameter.

Summary:

The data as reported is of good quality. Most results were reported without qualification or reported as undetected (U).

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EPA Region X Lab Management System  
Sample/Project Analysis Results

Page 1

Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130150

Description: RB-B15-01

Source: Well (Test/Observation)

Begin Date: 91/03/27 11:15

Metals - Specified		Water-Total	
		Result	Units
Arsenic	As-Total	1.5U	ug/l
Chromium	Cr-Total	0.4JB*	ug/l

(Sample Complete)

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130151

Description: RB-B15-01

Source: Well (Test/Observation)

Begin Date: 91/03/27 11:15

Metals - Specified		Water-Filtere	
		Result	Units
Arsenic	As-Diss	1.5U	ug/l
Chromium	Cr-Diss	0.2JB*	ug/l

(Sample Complete)

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EPA Region X Lab Management System  
Sample/Project Analysis Results

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130152

Description: RB-B4-01

Source: Well (Test/Observation)

Begin Date: 91/03/27 12:30

Metals - Specified		Water-Total	
		Result	Units
Arsenic	As-Total	1.8J*	ug/l
Chromium	Cr-Total	15.6 *	ug/l

Metals - Specified		Water-Total	
Matrix Spike #1		Result	Units
Arsenic	As-Total	136	% Recov
Chromium	Cr-Total	98	% Recov

Metals - Specified		Water-Total	
Matrix Spike #2		Result	Units
Arsenic	As-Total	144	% Recov

(Sample Complete)

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Sample/Project Analysis Results

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130153

Description: RB-B4-01

Source: Well (Test/Observation)

Begin Date: 91/03/27 12:30

Metals - Specified		Water-Filtere	
		Result	Units
Arsenic	As-Diss	1.5U	ug/l
Chromium	Cr-Diss	1.3B*	ug/l

(Sample Complete)

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130154

Description: RB-B10-01

Source: Well (Test/Observation)

Begin Date: 91/03/27 12:45

Metals - Specified		Water-Total	
		Result	Units
Arsenic	As-Total	2.4J*	ug/l
Chromium	Cr-Total	14.5 *	ug/l

(Sample Complete)

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EPA Region X Lab Management System  
Sample/Project Analysis Results

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130155

Description: RB-B10-01

Source: Well (Test/Observation)

Begin Date: 91/03/27 12:45

Metals - Specified		Water-Filtere	
		Result	Units
Arsenic	As-Diss	1.5U	ug/l
Chromium	Cr-Diss	1.1B*	ug/l

(Sample Complete)



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EPA Region X Lab Management System  
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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130158

Description: RB-B6-01

Source: Well (Test/Observation)

Begin Date: 91/03/27 15:20

Metals - Specified		Water-Total	
		Result	Units
Arsenic	As-Total	1.9J*	ug/l
Chromium	Cr-Total	1.7B*	ug/l

(Sample Complete)

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EPA Region X Lab Management System  
Sample/Project Analysis Results

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130159

Description: RB-B6-01

Source: Well (Test/Observation)

Begin Date: 91/03/28 08:30

Metals - Specified		Water-Filtere	
		Result	Units
Arsenic	As-Diss	1.9J*	ug/l
Chromium	Cr-Diss	0.7JB*	ug/l

Metals - Specified		Water-Filtere	
Matrix Spike #1		Result	Units
Arsenic	As-Diss	100	% Recov

Metals - Specified		Water-Filtere	
Matrix Spike #2		Result	Units
Arsenic	As-Diss	102	% Recov

(Sample Complete)

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130162

Description: RB-TD1-01

Source: Well (Test/Observation)

Begin Date: 91/03/28 09:45

Metals - Specified		Water-Total	
		Result	Units
Arsenic	As-Total	1.5U	ug/l
Chromium	Cr-Total	1.1B*	ug/l

(Sample Complete)

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EPA Region X Lab Management System  
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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130163

Description: RB-TD1-01

Source: Well (Test/Observation)

Begin Date: 91/03/28 10:00

Metals - Specified		Water-Filtere	
		Result	Units
Arsenic	As-Diss	1.5U	ug/l
Chromium	Cr-Diss	0.4JB*	ug/l

(Sample Complete)

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EPA Region X Lab Management System  
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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130164

Description: RB-TD2-01

Source: Well (Test/Observation)

Begin Date: 91/03/28 10:40

Metals - Specified		Water-Total	
		Result	Units
Arsenic	As-Total	1.5U	ug/l
Chromium	Cr-Total	1.9 *	ug/l

(Sample Complete)

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130165

Description: RB-TD2-01

Source: Well (Test/Observation)

Begin Date: 91/03/28 11:05

Metals - Specified		Water-Filtere	
		Result	Units
Arsenic	As-Diss	1.5U	ug/l
Chromium	Cr-Diss	0.9JB*	ug/l

(Sample Complete)

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130166

Description: RB-TD10-01

Source: Well (Test/Observation)

Begin Date: 91/03/28 09:55

Metals - Specified		Water-Total	
		Result	Units
Arsenic	As-Total	1.5U	ug/l
Chromium	Cr-Total	1.4B*	ug/l

(Sample Complete)

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130167

Description: RB-TD10-01

Source: Well (Test/Observation)

Begin Date: 91/03/28 10:20

Metals - Specified		Water-Filtere	
		Result	Units
Arsenic	As-Diss	1.5U	ug/l
Chromium	Cr-Diss	0.3JB*	ug/l

(Sample Complete)



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EPA Region X Lab Management System  
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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130168

Description: RB-TD15-01

Source: Well (Test/Observation)

Begin Date: 91/03/28 11:25

Metals - Specified		Water-Total	
		Result	Units
Arsenic	As-Total	1.5U	ug/l
Chromium	Cr-Total	1.5B*	ug/l

(Sample Complete)

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Laboratory: EPA, Manchester

Sample No: 91 130169

Description: RB-TD15-01

Source: Well (Test/Observation)

Begin Date: 91/03/28 11:40

Metals - Specified		Water-Filtere	
		Result	Units
Arsenic	As-Diss	1.5U	ug/l
Chromium	Cr-Diss	1.3JB*	ug/l

(Sample Complete)

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Blank ID: PB 14.72

Metals - Specified		Water-Total	
Blank #1		Result	Units
Arsenic	As-Total	1.5U	ug/l
Chromium	Cr-Total	0.2J*	ug/l

(Sample Complete)

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Project: HWD-127A RIDGEFIELD BRICK AND TILE

Officer: MLB

Account: AGDD3A

Blank ID: PB 16.97

Metals - Specified		Water-Filtere	
Blank #1		Result	Units
Arsenic	As-Diss	1.5U	ug/l
Chromium	Cr-Diss	2.0 *	ug/l

(Sample Complete)